SCIENCE & GOVERNMENT REPORT

10th Year of Publication

The Independent Bulletin of Science Policy

Vol. X, No. 2 | P.O. Box 6226A, Washington, D.C. 20015 | February 1, 1980

NSF, Defense Science Get Big Budget Boosts

The research and development segments of the budget that Mr. Carter sent to Congress January 28 contain a lot of hope and praise for science and technology, a bit more "real" money in the aggregate, and startup funds for several big projects.

For those who have alleged a shortfall of societal relevance in federal R&D spending in recent years, the new budget—for fiscal year 1981, beginning next October 1—is highly relevant to some of our society's major anxieties of the moment: There's heavy emphasis on military R&D, as well as on initiating programs designed to perk up industrial performance.

Looking first at the big numbers, Mr. Carter proposes to increase outlays for R&D from the $30.5 billion that the federal government expects to spend in this fiscal year to $33.7 billion next year; atop this, in a separate budget category that exists out of bureaucratic habit, outlays for the construction of R&D facilities would go from $1.7 billion to $1.9 billion. Within those big R&D sums, spending for basic research would rise from $4.1 billion to $4.6 billion. Calculating from the

Agency-by-Agency R&D Budgets for '81---Page 2

Council of Economic Advisers' optimistic forecast of a gross national product "deflator" of 9 per cent in the coming fiscal year, the Administration's budgetmakers cheerily conclude that R&D will get a real increase in purchasing power. Pointing out that the deflator is not the same as the Consumer Price Index—which is now running at an annual inflationary rate of over 13 per cent—White House Science Adviser Frank Press told a news briefing on January 26 that the increases would amount to 4 per cent in the overall R&D sum and 3 per cent for basic research.

That latter item appears to be very much on the minds of Mr. Carter and his senior advisers, for basic research is one of the very few budget items accorded the privilege of true growth, as is pointed out in the President's Budget Message to Congress. "Although I have kept spending in this budget from rising in real terms," the message states, "I have found it necessary to increase funds in a few critical areas. The most important of these are defense, energy, basic research, and the training and employment of our Nation's young people."

The Message goes on to make it clear that a bread-and-butter rationale underpins this budgetary decision. In a section tagged "Basic research," the President states that "In the long run, economic growth depends critically on technological development. For many years, this country has led the world in producing new technology. We are in danger of losing this leadership." And Mr. Carter then goes on to state that "We benefit today—in new industries, in millions of jobs, in lives saved, and in lives protected—from the investments in science made decades ago." And we've got to keep making them, he states.

As for specifics, the big gainer—as usual—is the Department of Defense, whose outlays for R&D are scheduled to rise from $13.2 billion to $15.1—a gain of 14.5 per cent, which is the biggest among any of the government's major R&D agencies. In terms of obligations," i.e., funds appropriated in fiscal 1981, but not necessarily expended in that year, the Defense increase

(Continued on Page 2)

In Brief

The Mood of Washington: President Carter used the traditionally benign occasion of the award of the National Medal of Science (January 14) to take a swipe at the Russians. "The Soviet Union," he told a White House gathering, "despite its enormous investment in science and technology, still trails the West in many fields which it recognizes to be crucial. Even with its avid efforts to identify scientific talent early . . . its repressive political system still stunts scientific growth."

There's been a sharp dropoff in male college freshmen who say they aspire to go to medical school, according to the Association of American Medical Colleges, but among women students, the stated goal of a medical career is on the rise. In 1966, AAMC reports from data collected by the American Council on Education, 40,496 male freshmen checked medicine as their career goal; the figure was down to 30,149 in 1978. In that same period, the medical-school goal among women freshmen rose from 8437 to 19,143.

What's That? "Beneath the surface of the rather ponderous beast of the Federal government lies an assemblage of several smaller animals whose collective function is to manage the ebb and flow of the government itself." That's the opening line of a recent press release in which the Commerce Department's National Telecommunications and Information Administration describes its activities.

Planned R&D Outlays of $33.7 Billion in '81

(Millions of Dollars)
Outlays

Agency	FY 1979	FY 1980 Est.	FY 1981 Est.	Percent Change 1980-81
Total	26,578	30,477	33,717	+10.6
DOD	11,454	13,253	15,169	+14.5
NASA	4,064	4,858	5,277	+ 8.6
DOE	4,413	4,871	5,088	+ 4.4
HHS (Health, Human Serv.)	3,068	3,428	3,661	+ 6.8
NSF	775	853	964	+12.9
USDA	611	652	670	+ 2.7
EPA	337	384	413	+ 7.4
Interior	393	396	413	+ 4.5
Labor	102	277	374	+35.0
Commerce	305	347	394	+13.5
DOT	340	332	348	+ 4.9
All Others	716	826	946	+14.5

SOURCES: National Science Foundation; Office of Management and Budget

BUDGET *(Continued from Page 1)*

is even larger, going from $13.7 billion to $16.5, an increase of 20.2 per cent.

The bulk of this R&D money will be going for big military equipment, including startup funds for a cargo aircraft for the recently announced Rapid Deployment Force, and for continuing the development of the MX missile. Also, as Science Adviser Press emphasized at his budget briefing, the Defense Department is expanding its presence in basic research, with its spending in that area scheduled to rise from $383 million to $471 million, an increase of 23 per cent. Dr. Press said that William J. Perry, the Under Secretary of Defense for Research and Engineering, told him that Defense support of basic research in universities is slated to go up by 25 per cent in the new fiscal year.

Another big gainer, though not in the monetary class of Defense, is the National Science Foundation, which, having last year come within a few millions of the magic billion-dollar appropriations mark, is now shooting for a budget of $1.148 billion. Congress willing—which applies to all of Mr. Carter's budget requests—this would enable NSF to increase its support of basic research to $951 million, an increase nearly 17 per cent above the present sum, and it would also boost applied research to $93 million, a gain of over 25 per cent. The percentage splurge for applied research reflects NSF's newly enlarged role in support of industrial innovation activities—a chore that it shares with the Department of Commerce in a variety of activities that add up to about $50 million. Among these are NSF's $20 million for lubricating academic-industrial R&D linkups, and another $10 million to assist small high-technology industrial firms. The Foundation is also involved in a basic automotive research program that aims to orchestrate efforts of industrial, academic, and government laboratories. Where this is going and how much it will cost is a matter of some wry commentary in non-government circles, but the official word in the newly issued budget book is that "The Government share of the costs of the program are estimated to be up to $800 million over 10 years, with matching funds from industry of up to $500 million."

Also in NSF's new-starts department is a $14.3 million item to assist universities—which will be obliged

(Continued on Page 3)

© Science & Government Report, Inc., 1980

ISSN 0048-9581

Editor and Publisher
Daniel S. Greenberg

Contributing Editor
Anne Roark

Associate Publisher
Wanda J. Reif

Circulation Manager
Susan Burke

European Correspondents
Michael Kenward (London); Francois Seguier (Paris)

Independently published by *Science & Government Report,* Inc., twice monthly, except once each in January, June & July. Annual Subscription: Institutions, $89.50 (two years, $168.50); individuals, $48.50 (two years, $82.50). Editorial offices at 3736 Kanawha St., N.W., Washington, DC 20015. Tel. (202) 244-4135. Second class postage paid at Washington, DC. Please address all subscription correspondence to Box 6226A, Northwest Station, Washington, DC 20015. Reproduction without permission is prohibited. SGR is available on Xerox University Microfilms.

. . . NSF's New Sea Drilling Program Aims Deep

(Continued from Page 2)

to provide matching funds—in updating research buildings. At a press briefing, NSF Director Richard C. Atkinson emphasized that the program is intended solely for renovating geriatric buildings, and that it's not for laboratory equipment or anything else. The rationale for this, NSF explains, is that "Many laboratories have outdated facilities which bring less than optimal return on the investment of Federal dollars for support of research."

The centerpiece in NSF's future programs is what's formally titled the Ocean Margin Drilling Program, which refers to that space between the continental shelf and the deep sea. In collaboration with industry, Dr. Atkinson announced, NSF is planning a 10-year, $700-million drilling program that aims to operate in 13,000 feet of water and then down through 20,000 feet of ocean-bottom sediment. With details still to be worked out, the intended platform for this colossal engineering feat is the *Glomar Explorer,* the big ship that Howard Hughes constructed for the CIA's partially successful attempt to retrieve a sunken Soviet submarine from the Pacific floor some years ago. NSF says that it will manage the program, and that interested potential partners include seven big oil companies and a drilling firm; foreign governments may also join in, as some half-dozen already have in supporting the operations of the *Glomar Challenger,* whose decade-long drilling program has set the stage for proposed deeper venture.

The budget of the National Aeronautics and Space Administration is once again dominated by the ravenous financial demands of that still-earthbound albatross, the Space Shuttle. NASA now says that the Shuttle will make its first orbital flight before the end of 1980, but, regardless of when—or if—it ever gets aloft, the costs of this money-gulper are plainly coming out of the hides of NASA's scientific and aeronautical research programs. Overall NASA will increase its outlays from $4.8 billion to $5.2 billion, a ground-losing raise of 8.6 per cent in paper dollars. There will be new starts in two major fields, space sciences and applications, with the initiation of work on the long-sought-for gamma ray observatory, and a National Oceanic Satellite System to be operated by NASA, and the Defense and Commerce departments. The Shuttle is budgeted for $1.8 billion in fiscal 1981, plus a $300-million supplement atop the $1.6 billion it's getting this year. The gamma ray spacecraft and NASA's contribution to the Oceanic Satellite System will total about $25 million in the new fiscal year.

The President's spending proposals for the National Institutes of Health need not be taken seriously, for this year, as in most recent years, the budget reflects the expectation that the Congress will start from whatever figure the President proposes and add on to that. Referring to the budget's request for a trifling $139 million increase in NIH's $3.5 billion budget, Dr. Press commented that when it comes to biomedical research "it is difficult for the Administration to plan because of political manipulation of the budget over the years." His references may have been to the biomedical research lobbies that plague the capital or even to the lingering effects of the Nixon administration's long ago random hackings at NIH programs. In any case, Dr. Press expressed hopes that the Califano plan for designing biomedical research budgets—soon to emerge from the NIH labyrinth—will contribute to what Press referred to as a "rational process" for designing these programs.

What's clearly evident as the Carter Administration

(Continued on Page 4)

Basic Research: Defense the Big Gainer

(Millions of Dollars)
Outlays

Agency	FY 1979	FY 1980 Est.	FY 1981 Est.	Percent Change 1980-81
Total	3,748	4,184	4,679	+11.8
HHS (Health, Human Serv.)	1,390	1,561	1,694	+ 8.5
NIH	1,295	1,445	1,578	+ 9.2
NSF	704	774	869	+12.2
DOE	456	524	584	+11.5
NASA	465	502	542	+ 8.0
DOD	320	383	471	+23.0
USDA	232	244	262	+ 7.2
All Others	181	196	257	+31.1

SOURCES: National Science Foundation; Office of Management and Budget

NSF: Plans for First Billion-Plus Budget

(Dollars in Millions)

Budget Activity	FY 1980	FY 1981	Difference FY 1981/80 Percent
Mathematical & Physical Sciences	$226.4	$ 264.2	16.7%
Astronomical, Atmospheric, Earth, & Ocean Sciences	217.9	241.3	10.8
U.S. Antarctic Program	55.8	63.4	13.5
Ocean Drilling Programs	19.5	27.3	40.2
Biological, Behavioral, & Social Sciences	166.5	182.0	9.3
Engineering & Applied Science	111.9	137.0	22.5
Scientific, Technological & International Affairs	26.1	28.8	10.5
Cross-Directorate Programs	25.5	52.0	103.5
Science Education	78.2	85.7	9.6
Special Foreign Currency	5.5	5.5	—
Program Development & Management	60.6	60.8	0.4
Total	$993.9	$1,148.0	15.5%

BUDGET

(Continued from Page 3)

goes into its fourth year is that the President and his inner circle have more than a ceremonial interest in science and technology. The R&D budget boosts ordered up by Mr. Carter—and supplemented still further by Congress on some occasions—have overall kept pace with inflation. There was some slippage last year when the inflation rate zoomed far ahead of what the budget-maker had reckoned on when they composed their plans for fiscal 1980. But with the federal government now spending some $35 billion a year on R&D, and industry and other sources putting up approximately $25 billion of their own money, it's increasingly difficult to argue that finance is a major problem on the American scientific and technical scene. Even some of the traditionally dour mandarins of research policy have recently been conceding that point in Congressional testimony—though they hurriedly add that while the present situation is satisfactory, lots of trouble may lie ahead.

What is perhaps most noteworthy about this budget is that more so than any of its predecessors, it takes a very long view of the research process, while at the same time tailoring many R&D programs to presentday problems. Over the past 20 years, there has always been some measure of those two qualities in the annual budget plan. But the impression around science-policy circles in Washington is that the Carter-Press relationship, in close collaboration with the money and policy managers of the Office of Management and Budget, has resulted in more orchestration of the national R&D effort than has ever been seen. The theme of cross-sector links—industry, academe, government, even other governments—in the financing and conduct of research is taking root in R&D policymaking, though what fruit it will bear is not yet evident. Quietly talked about, but only just beginning to show up in policymaking, is the recognition that tight money necessitates choices based on research quality, rather than politically satisfying spread-the-wealth programs.

Some insight into the budget's quality in terms of its policy implications may be found in a remark made by a Kennedy associate who was on hand at Dr. Press' budget briefing for the obvious purpose of looking in on a subject area with which the Senator has long been involved. When the briefing was over, the Kennedy man said he didn't think Carter's R&D budget offered Kennedy any good opportunity for attack.—DSG

US-Venezuela Science Pact

The US and Venezuela have entered into a five-year Bilateral Science and Technology Agreement that provides for developing collaborative projects in a variety of fields, including energy, health, agriculture, and management. The Agreement was signed January 11 in Caracas by Presidential Science Adviser Frank Press and Raimundo Villegas, the Venezuelan Minister of State for Science and Technology.

Agriculture Budget Stresses Basic Science

The budget for the Department of Agriculture puts a good deal of emphasis on basic research—thus reflecting the Administration's often-stated view that the farm economy has fairly well exploited existing scientific knowledge and needs a new infusion of research.

Following a slight decline in agricultural research during the current fiscal year, the proposals for fiscal 1981 call for a 12 per cent increase in basic science, bringing the Department's total to $324 million. The overall budget for agricultural R&D would go from $743 million to $786 million.

The purpose of the increases, the budget explains, is to enable the American farmer to "continue to be one of the world's most efficient and dependable suppliers of food and fiber."

Rhetoric aside, the funding plans do reflect renewed concern about the quality of the plant and animal research that is already underway. The increases, according to official briefing documents, are for support of basic research to increase crop and animal production, to meet human nutrition requirements, to insure the health and safety of food supplies, and to protect soil and water resources.

One important change in the research program, the Department says, is the expansion of agriculture and resources inventory surveys through satellite remote sensing. Known as AGRISTARS, the program is an effort to apply space technology to the forecasting of crop yields.

The budget also seeks continued support for competitive research grants while reducing support for special research grants. Under the Carter plan, the special grants program would drop from $16.5 million to $14.6 million. The competitive grants—opposed by pork-barrelling Congressmen—would increase from $16 million to $25 million.

While some Congressmen may not be happy about the $9 million increase, they surely will be pleased to see that at least part of the money is slated for an increasingly popular research subject—the relationship between health and human nutrition.

Predominantly black land-grant colleges are slated for considerable improvement under the 1981 budget. The Administration has proposed legislation authorizing a $50 million research facilities improvement program for the so-called 1890 colleges and the Tuskegee Institute. Under the proposal, state governments would be required to provide matching funds equal to the federal share.

With overall agricultural research outlays for colleges and universities reaching $215 million in 1981 (compared to $194 million in 1980 and $169 million in 1979), the overall picture for agricultural research is a happy one—and considerably more generous than had widely been anticipated.

Closer Sino-US Science Ties

In accord with what may be a political law of thermodynamics, the spreading chill in Soviet-American research relations has been accompanied by a further warming of Sino-American relations related to research and high-technology.

American collaboration with the People's Republic of China is still quite limited in these areas, mainly because—as it's becoming increasingly evident—the Chinese have a long way to go in building up their research enterprise. But, in the context of the Soviet invasion of Afghanistan, and the inevitable interest that this focuses on the prickly Sino-Russian relationship, any US contribution to Chinese strength draws special notice.

This was very much the case when Defense Secretary Brown, on a sudden trip to Peking last month, announced that the US would equip China to make use of the Landsat satellite system. This announcement was shortly followed by a visit to Peking by a US scientific delegation, headed by White House Science Adviser Frank Press. The visit, from January 22-24, was long ago scheduled as the first annual meeting of the US-PRC Joint Commission on Scientific and Technological Cooperation, which was created just one year ago. But, in the presentday international political atmosphere, the presence of a high-powered American scientific delegation in Peking is not easily regarded as a routine matter. Thus, though the Landsat agreement had been announced during Secretary Brown's visit, the *New York Times* highlighted the actual signing of a memorandum of understanding with a page one photo of Frank Press in Peking.

Actually, not much else of a concrete nature came out of the visit, but since such get-togethers require the appearance of forward motion, the official US announcement stated that "The Commission decided that the two sides would actively explore possibilities for cooperation in new areas, including environment, transportation, basic sciences, aviation, statistics, nuclear energy (including nuclear physics and nuclear fusion), electronics, telecommunications, and construction and urban planning."

That's a big menu, as was no doubt noted in Moscow.

DOE to Increase Spending in Universities

The Administration's energy strategy and programs, the budget says, "are grounded in the belief that we must move forward on many fronts to develop whatever means are needed to establish our security and independence from foreign sources of energy."

What that means for the coming fiscal year is an increase in expenditures on fossil fuels, solar energy, and nuclear fusion.

Overall obligations for R&D in the Department of Energy are expected to total $5.1 billion in 1981, according to Frank Press, the White House science adviser.

If the President gets his way with Congress, support for basic research will increase by 13 per cent over 1980, from $523 million to $593 million. That's good news for the universities, Press says, for it means their share of energy-research budget could go from its current level of $320 million to $361 million in 1981.

Most of the federal support for energy research and demonstration projects is viewed as a "longer-term," "higher-risk" complement to the investment of private industry.

The President has announced, for example, that the nation should set a national goal of deriving 20 per cent of its energy from solar sources by the year 2000. Because the use of solar energy is only beginning to be economically feasible, the government has had to carry the burden of developing the solar industry. So far, the Administration has paid more lip service than money to the problem. Nonetheless, the 1981 budget does include significant increases for such projects as wind-energy, conservation and energy storage systems.

Overall the request for solar energy research and development includes $1.14 billion, compared to $924 million in 1980. Only about $707 million of that total would be administered by the Department of Energy. The rest would go to a dozen or so programs run by other federal agencies, including the Department of Agriculture's biomass loan program and the Department of Housing and Urban Development's solar bank.

The 1981 energy budget also places special emphasis on conservation. Grants would continue to be provided to assist low-income families, hospitals, and schools to conserve fuels by insulating and making energy-saving structural changes.

While incentives to encourage conservation would be continued, the President also has proposed new studies and analyses to determine what type of buildings are most energy efficient. The results of those studies, the President says, will provide the basis for the next level of cost-saving strategies to encourage conservation among consumers.

Construction of new energy-research facilities plays an important role in the President's 1981 budget. The President is requesting, for example, support for the

(Continued on Page 7)

House Science Committee Issues Blockbuster Self-History

Washington's information problems come down to too much or too little, and it's in that former category—by some large multiple—that the literature on Congress has been expanded with the publication of *Toward the Endless Frontier,* a 1073-page, 20-year history of the House Committee on Science and Technology.

Written by ex-Rep. Ken Hechler (D-W. Va.), who was a member of the committee during his 1959-77 service in Congress, "The Endless," as it's coming to be referred to, cost $125,000 in salaries, plus $200,000 in production costs, according to *Congressional Quarterly.* Hechler, an ex-political science professor and author of the World War II battle history *The Bridge at Remagen,* drew a salary of $47,500 a year while attached to the committee staff from June 1978 to the end of January 1980. CQ reports that the volume, available from the Government Printing Office at $11 per copy, cost the government $65 apiece.

In addition to the imbalance that it provides between bulk and importance, "The Endless" is also noteworthy for its reverential treatment of a legislative group that—as everyone on Capitol Hill knows—has never been regarded as a formidable intellectual or political assemblage.

In fact, as Hechler points out, there have been times when so few members showed interest in serving on the Science and Technology Committee that it was relegated to the category of a secondary committee to conform to the rule of only one major committee per member.

The present chairman of the committee, Rep. Don Fuqua (D-Fla.) is quoted in committee press release as saying that the book is a "complete and accurate chronicle of the many issues with which the committee has grappled over the past 20 years."

It's also an example of how Congress so often exempts itself from the pennypinching requirements that it demands for activities off Capitol Hill.

Defense Research: Focusing Again on Academe

Whatever else can be said about the new defense budget, it makes no pretense of following the strategy of "restraint" that characterizes the overall budget requests for 1981.

Basic research in the Department of Defense would go up 21 per cent, from $383 million to $471 million, under Mr. Carter's proposals. For universities that could mean a 25 per cent increase in one year, according to Frank Press, White House science adviser.

With the spirit of the Mansfield Amendment and its resulting limitations on defense research in academe now almost entirely gone, it is quite likely that the military presence on campus may significantly increase in the days ahead.

Indeed, research support in DOD is likely to have a significant impact on all government research. The proposed $15.1 billion defense research budget comprises nearly half of the total federal research budget.

Among the areas to be emphasized in the coming fiscal year, according to the budget documents, are materials research, electronics, environmental research, and behavioral research relevant to combat situations. Under the Carter proposal, efforts would also continue on energy lasers and particle beams for potential weapons applications.

While Defense officials were unsure last week precisely where or how the increases in university-based research might be spent, Dr. Press emphasized the aim of "re-cementing" the relationship between the universities and the defense establishment.

"The extent of the intent," Press explained, simply does not show up in the budget figures. Those figures indicated that university defense spending will increase only about 20 per cent over 1980.

The happy relationship between DOD and the universities, which had extended from the end of World War II to the early 1960's, ended during the late 1960's and early 1970's under pressure from student anti-war turmoil and government economizing.

In the new Cold War atmosphere that has so rapidly replaced detente, however, there are no serious impediments—political, financial, or academic—to a restoration of the old close relationship that Defense once enjoyed with the universities.

ENERGY *(Continued from Page 6)*

construction of the Solar Energy Research Institute in Golden, Colo., continuation of the Isabelle high-energy physics accelerator at the Brookhaven National Laboratory, and the energy-saver project at the Fermi National Laboratory. The 1981 budget also asks funds to start the first phase of the ATLAS accelerator project at Argonne National Laboratory.

Ranking high in the Administration's energy-research planning is the expectation that the windfall tax will eventually yield perhaps $4-5 billion for energy R&D—on top of what Congress now appropriates from general revenues. White House sources seem to expect that Congress will let the President have complete sway over those bonus bucks. But on the basis of past performance, the chances for that are quite dim.—Anne Roark

(The author is an Assistant Editor of *The Chronicle of Higher Education.*)

Nature : The Maddox Restoration

John Maddox, the prolific science journalist, will be recycling into the editorship of Britain's *Nature,* a post that he occupied from 1966-73, after which he went on to various positions, including his present job, director of the Nuffield Foundation. At *Nature,* Maddox will take over by June 30 from David Davies, who left recently to become Director of the Darlington Trust at Barnstable in Devon, a regional cultural foundation.

In his former tenure at *Nature,* which vies with America's *Science* for recognition as the world's foremost across-the-board research journal, Maddox was known as a restless and ambitious innovator and expansionist. *Nature* is owned by MacMillan Journals Ltd., which is enjoying a good deal of prosperity and is looking for new worlds to conquer.

Subscription Form

Science & Government Report
Northwest Station
Box 6226A
Washington, D.C. 20015

☐Renew my subscription; ☐Check enclosed

☐Enter my subscription; ☐Please bill

Institutional subscribers: one year, $89.50☐; two years, $168.50☐

Individual subscribers: one year, $48.50☐; two years, $82.50☐

(Overseas airmail, $17.50 per year additional.)

Name _____

Address _____

_____ Zip _____

Soviet Puzzle: R&D Chief Suddenly Quits

While the forced internal exile of Andrei Sakharov commands wide public attention, official watchers of the Soviet research scene are considerably more interested in the unexplained, but apparently related, announced resignation of one of the top figures in Soviet research administration: Vladimir Kirillin, Chairman of the State Committee for Science and Technology.

Kirillin's resignation, announced, without explanation, within a day of Sakharov's sudden removal from Moscow, has fed speculations that he quit in protest upon learning that the heavy-handed security cops had finally been unleased against Sakharov. Checks with Washington officials who are tuned to reports from Moscow repeatedly bring up speculations that Kirillin, the founding chief of the 15-year-old, highly influential State Committee, was a protector of Sakharov. But, then, no one knows for sure. Kirillin, who is 68, is said to have had some health problems in recent years, but, as far as is known, not of a serious nature. So, it's the close linkage in time to the Sakharov episode, and the absence of any explanation or additional information, that feeds the speculations about a connection.

Then, too, there's the fact that Kirillin's longtime number two man on the State Committee is Dzhermen Gvishiani, an affable and energetic technocrat who happens to be the son-in-law of the ailing Premier Kosygin. What, if anything, the Kosygin link has to do with Sakharov and Kirillin is also unknown.

Nor have Washington-based watchers figured out the meaning of the announced replacement of Kirillin with Gury Marchuk, chairman of the Siberian branch of the Academy of Sciences.

The crackdown on Sakharov has inspired a number of protests from American scientific leaders, as well as another round of warnings that bilateral research collaboration is going to go down the drain if the Soviets don't mend their ways.

National Academy of Sciences President Philip Handler, whose 1973 protest in behalf of Sakharov is widely credited with preventing the Soviet physicist's arrest at that time, last week issued a protest that suggested a link between the Kirillin resignation and the Sakharov case. Noting Sakharov's internal exile and the "simultaneous resignation" of Kirillin, Dr. Handler stated that the resignation "adds to our concern," and he went on to warn:

"In recent years, the scientists of both nations have carefully built structures of communication and good will. This blatantly punitive act against Academician Sakharov can only be regarded as a challenge to further cooperation and an act of deliberate ill will. What the consequences may be I cannot foresee, but I find it difficult to image scientific exchange continuing in the spirit we had created heretofore."

Science & Government Report
Northwest Station
Box 6226A
Washington, D.C. 20015

Second class postage paid at Washington, D.C.

00006 9999
XEROX UNIV MICROFILMS
300 N ZEEB RD

ANN ARBOR MI 48106